

APPENDIX

Pseudo code for optimizing color separation using a cache is as follows:

- Identify color components of output document and characterization of output composite color space.
- 5 · Generate empty pre-separated PDF document. The association between pages comprising a single composite page is described in a SeparationInfo dictionary.
- For each graphical element on the page:
 - If it is a form XObject do the following:
 - 10 · search cache for previously separated representation if one exists simply
 - create a reference to the cached representation in each of the plates.
 - If not cached
 - 15 · Separate form XObject (step 336: may be recursive...using the outer algorithm here)
 - Reconstruct grayscale form XObject per plate
 - Submit reconstructed objects to cache
 - Create a reference to the reconstructed object.
 - Goto next element
 - Otherwise, Find its color data and description of the associated color space
 - 20 · If it is a type 1 pattern color space do the following (same as 234 to 240)
 - search cache for previously separated representation if one exists

simply create a associate the object with cached representation in each of the plates.

·If not cached

·Separate pattern

5 ·Reconstruct grayscale pattern per plate

·Submit reconstructed patterns to cache

·Associate reconstructed pattern with the object for each of the plates

·Goto next element

10 ·Otherwise, Convert color values to target device space or leave as custom

color

·For colorant whose value is not 0, add a grayscale version of the item to the associated plate.

·Examine overprint settings and determine which if any plates will be drawn with an additional knockout element.

15 ·Convert individual grayscale object streams into page contents and write pages.

Pseudo code for performing color separation using a cache is as follows:

- Identify color components of output document and characterization of output composite color space
- 5 • Generate pre-separated PDF document. The association between plates comprising a single composite page is described in a separation info dictionary.
- For each graphical element on the page do the following:
 - find its color data and description of the associated color space
 - convert color values to target device space or leave as custom color
 - examine overprint settings and determine which if any plates will be drawn with an additional knockout element.
 - if it is a composite object (pattern, form, annotation) search cache for previously separated representation
 - if not cached, generate color and knockout elements with associate gray tint values to be placed in appropriate plates.
 - cache composite representations of composite elements as necessary.
 - Convert individual grayscale object streams into page contents and write pages.
- 10
- 15